

Remarks/Arguments

Claims 1-43 are pending in the application.

The Office has rejected claims 1-43 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,544,359 to Tada et al. (hereinafter “Tada”) in view of Jim Gray & Andreas Reuter, “Transaction Processing: Concepts and Techniques” (Morgan Kaufmann, 1993) (hereinafter “Gray”). In light of the arguments below, Applicant asks the Office to reconsider these rejections and to allow all of the claims.

The 103(a) Rejections over Tada in view of Gray

Tada does not teach or suggest flushing a transaction log from volatile storage to non-volatile storage “*before* execution of an end transaction procedure begins,” as required by Applicant’s claims 1, 17, 21, 24 and 28 (emphasis added). Rather, as noted in prior Office action replies, Tada discloses writing historical log file (HLF) data to nonvolatile HLF buffer memory *after* issuing a transaction end (TRN-END) macro instruction (*see, e.g.*, Tada, Fig. 5, steps 6 & 10; col. 10, line 9, to col. 12, line 3). As a result, the writing of log data to nonvolatile memory in Tada occurs after the execution of an end transaction procedure has begun.

Further, the cited portions of Gray, which teach general transaction processing and management techniques including a “two-phase commit protocol” and a “basic DO-UNDO-REDO protocol” (*see, e.g.*, Gray, pg. 574), do not address this deficiency in Tada. While Gray does discuss a generic “log_flush” routine (*see, e.g.*, Gray, pg. 502), Applicant is unaware of any section of Gray that teaches or suggests flushing a transaction log from volatile storage to non-volatile storage by each access module before execution of an end transaction procedure begins, as required by Applicant. As such, neither Tada nor the cited portions of Gray, taken alone or in combination, teaches or suggests all the limitations of Applicant’s claims 1, 17, 21, 24 and 28. The result is that these claims and their dependents all are patentable over Tada in view of Gray.

Regarding claim 10, the Office action concedes that Tada does not disclose a “first access module sending an end transaction directive to a fallback module associated with the first access module, the fallback module being part of the cluster,” as recited by Applicant. The Office suggests, however, that Gray teaches this limitation, citing pages 34, 61-62, 562-576 and 943. As noted above, the cited portions of Gray teach general transaction processing and management techniques. While Gray does disclose “replicated data” (*see, e.g.*, Gray, pg. 34), Applicant is unaware of any section of Gray that teaches a fallback module for automatically storing a “copy of a data portion, such as a row of a table . . . on a different access module 20 than where the original of the data portion is stored,” as disclosed by Applicant (*see* Application, pg. 15, line 29 – pg. 16, line 1). By corollary, Applicant is similarly unaware of any section of Gray that so much as suggests “a first access module sending an end transaction directive to a fallback module associated with the first access module,” as required by Applicant’s claim 10. As such, neither Tada nor Gray, taken alone or in combination, teaches or suggests all the limitations of Applicant’s claim 10. The result is that claim 10 and its dependents are patentable over Tada in view of Gray.

Conclusions

In light of the foregoing amendments and arguments, Applicant asks the Office to reconsider this application and to allow all of the claims. Please apply any charges that might be due, excepting the issue fee but including fees for extensions of time, to deposit account 14-0225.

Respectfully,

A handwritten signature in black ink, appearing to read "John D. Cowart", written over a horizontal line.

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